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Creel Census and Biological Data from the Sport Fisheries Occurring at Great Bear Lake and Adjacent Areas, N.W.T., 1984-85

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ABSTRACT

Dunn, J.B., and M.M. Roberge. 1989. Creel census and biological data from the sport fisheries occurring at Great Bear Lake and adjacent areas, N.W.T., 1984-85. Can. Data Rep. Fish. Aquat. Sci. 757: v + 48 p.

Data on fish (excluding lake trout) angled from Great Bear Lake and reported in standard and intensive creel census programs conducted in 1984 and 1985 are presented. In addition, data on fish angled and retained by anglers (based at the sport fishing lodges on Great Bear Lake) from other adjacent lakes and rivers in the area of Great Bear Lake are presented. Results from an experimental netting program conducted on Great Bear Lake (excluding lake trout) is included. Biological information includes length, weight, age, sex, and maturity.

Key words: angling; experimental netting; exploitation; Arctic grayling; Thymallus arcticus; northern pike; Esox lucius; lake whitefish; Coregonus clupeaformis; Arctic charr; Salvelinus alpinus; walleye; Stizostedion vitreum; lake trout; Salvelinus namycush.

RÉSUMÉ

Dunn, J.B., and M.M. Roberge. 1989. Creel census and biological data from the sport fisheries occurring at Great Bear Lake and adjacent areas, N.W.T., 1984-1985. Can. Data Rep. Fish. Aquat. Sci. 757: v + 48 p.

On présente les données sur les poissons (à l'exception du touladi) pêchés dans le Grand Lac de l'Ours et enregistrées lors de programmes normaux et intensifs de rendement de la pêche menés en 1984 et en 1985. On présente aussi les données sur les poissons pêchés et gardés par les pêcheurs (des pavillons de pêche du Grand Lac de l'Ours) dans des lacs et des rivières dans la région du Grand Lac de l'Ours. Les résultats du programme de pêche expérimentale au filet réalisé dans le Grand Lac de l'Ours (à l'exception du touladi) sont inclus. Les renseignements biologiques comprennent la longueur, le poids, l'âge, le sexe et la maturité.

Mots-clés: pêche sportive; pêche expérimentale au filet; exploitation; ombre de l'Arctique; Thymallus arcticus; grand brochet; Esox lucius; corégone; Coregonus clupeaformis; omble chevalier; Salvelinus alpinus; doré; Stizostedion vitreum; touladi; Salvelinus namycush.

INTRODUCTION

The Department of Fisheries and Oceans initiated, in 1984, a two-year study to investigate the status of lake trout exploited by the lodge-based sport fishery on Great Bear Lake, N.W.T. (Roberge and Dunn 1988). The study consisted of an experimental netting program, a standard creel census program, and an intensive creel census program. Data collected on lake trout were used to evaluate the status of lake trout in areas of Great Bear Lake utilized by the lodge-based sport fishery (Roberge and Dunn 1988).

Additional data were collected on other fish species encountered during the study. This included data on; catch and effort, and biological information on Arctic grayling, northern pike, lake whitefish, round whitefish, and lake cisco from the experimental netting program conducted on Great Bear Lake; catch and effort data, and biological information on lake trout, Arctic grayling, northern pike, Arctic charr, walleye, and inconnu from the standard creel census program for angling conducted on Great Bear Lake and adjacent lakes and rivers; and biological data on Arctic grayling, northern pike, and lake whitefish from Great Bear Lake as part of the intensive creel census program. These data are presented in this report.

STUDY AREA

Great Bear Lake (65-50N, 120-45W) is an extremely oligotrophic lake with a water surface area of 30 397 km^2 and a mean depth of 71.7 m (Fig. 1). Water clarity is high with maximum Secchi transparencies of 30 m. Dissolved solids are low (78.4 to 81.0 ppm) and pH ranges between 7.8 and 7.9 (Johnson 1975). A detailed decription of the lake and its fisheries are provided in Roberge and Dunn (1988) and Yaremchuk (1986).

The Anderson River (69-45N, 129-00W) system flows into the Beaufort Sea (Wood Bay area) (Fig. 1). It has a length of 600 km and a drainage area of 54 400 km^2 (Sutherland and Golke 1978). The river was used in 1985 by Trophy Lodge as a side trip to angle for lake trout and inconnu. Other fish species found to occur in the system include; Arctic grayling, northern pike, whitefish sp., sucker sp., and burbot (Sutherland and Golke 1978). Domestic fishing by residents of the Colville Lake community (Sutherland and Golke 1978) also takes place along the river.

Two lakes, Lac Belot (66-55N, 126-18W) and Lac des Bois (66-40N, 125-15W) within the Anderson River drainage system were also used by Trophy Lodge as side trips to angle for lake trout and northern pike (Fig. 1).

The Coppermine River (67-49N, 115-04W) flows into Coronation Gulf and has a drainage area of 46 000 km^2 (Fig. 1). A detailed description of the river system and the domestic fishery is described in Gillman and Kristofferson (1984). The river was used by Arctic Circle Lodge, 1984, and Trophy Lodge, 1985, as a side trip to angle for Arctic charr.

The Kugaryuak River (67-42N, 113-19W) another river that flows into Coronation Gulf, has a length of 60 km and a drainage area of 1 560 km^2 (Sutherland and Golke 1978) (Fig. 1). The river was utilized by Bransons Lodge for side trips to angle for Arctic charr. Other fish species found in the system include; broad whitefish, ninespine stickleback, whitefish sp., and starry flounder (Sutherland and Golke 1978).

Lac Ste. Therese (64-38N, 121-32W) is part of the Johnny Hoe River System which flows into the south end of McVicar Arm, Great Bear Lake (Fig. 1). The lake was used by Bransons Lodge as a side trip to angle for Arctic grayling and walleye. People from the community of Fort Franklin use the Johnny Hoe River for domesitc fishing (Yaremchuk 1986).

METHODS AND MATERIALS

GENERAL

Five of six management areas (and sport fishing lodges) of Great Bear Lake were surveyed during the two year study from 1984 to 1985. The Dease Arm (Great Bear Lake Lodge), McTavish Arm (north) (Arctic Circle Lodge), McTavish Arm (south) (Bransons Lodge), McVicar Arm (north) (Great Bear Lodge) were surveyed in 1984 and the Smith Arm (Trophy Lodge) was surveyed in 1985 (Fig. 2). Keith Arm was not surveyed.

DFO personnel were stationed at sport fishing lodges on Great Bear Lake from the beginning to the near end of their fishing season to collect standard creel census information, to oversee intensive creel census programs, and to conduct experimental netting programs.

Anglers based at sport fishing lodges fished other lakes and rivers as part of side trip packages offered by various lodge managements. Data were collected, whenever possible, from these side trips as part of the standard creel census program conducted in 1984 and 1985.

EXPERIMENTAL NETTING

Experimental netting was conducted in Great Bear Lake using standard gangs composed of 50 m lengths each of 38, 64, 89, 114, and 139 mm (stretched mesh) nylon gill nets. Nets were set randomly at a number of locations in areas utilized by each lodge (Roberge and Dunn 1988). Gill nets were usually set in late evening and lifted in early morning to minimize fish mortalities and to prevent overlap with angler fishing in the same area. The catch was recorded by mesh size and by species. The fish were sampled later for biological analysis. Fish caught live and in good condition were measured for fork length and released. Information on catch, catch per unit effort (CPUE), and biological data are provided in Tables 1-43.

STANDARD CREEL CENSUS

A standard creel census was carried out at each of the five sport lodges in conjunction with the lodge operation. A detailed description of the procedure used is provided by Roberge and Dunn (1988). Information on the catch, effort, and CPUE for fish (other than lake trout) angled from Great Bear Lake is provided in Table 44. Biological data for all fish angled and retained has been presented in Roberge and Dunn (1988).

Angling by lodge based anglers as part of a side package, was also conducted at the Anderson, Coppermine, and Kugaryuak rivers and at the lakes of Lac Belot, Lac des Bois, and Lac Ste. Therese (Fig. 1). Catch, effort, CPUE, and biological data for fish angled and retained from these waterbodies are presented in Tables 44-59.

INTENSIVE CREEL CENSUS

An intensive creel census program was developed and initiated at four of the five lodges (excluding Bransons Lodge) to determine the number and size range (fork length) of the exploited segment of the sport fish stocks in Great Bear Lake. A detailed description of the procedure used and information collected on lake trout is provided by Roberge and Dunn (1988). Catch, effort, CPUE, and biological data is provided in Tables 60-73.

BIOLOGICAL SAMPLING

Fish from gill nets and angler's creel were sampled for fork length (±1 mm), round weight (±50 g), aging structures (scales and otoliths), sex, stage of maturity, and stomach contents. Sex and relative stage of maturity were determined by examination of the gonads. Relative stages of maturity were coded according to the stages described in Appendix 1.

Sagittal otoloths were taken from lake trout and Arctic charr, and scales taken from Arctic grayling, northern pike, walleye, lake whitefish, round whitefish, cisco, and inconnu as described by Hatfield et al. (1972). Age determinations were made as decribed in Roberge and Dunn (1985).

Scientific names of those fish caught follow Scott and Crossman (1973): lake trout, Salvelinus namaycush (Walbaum); Arctic grayling, Thymallus arcticus (Pallas); northern pike, Esox lucius (Linnaeus); walleye, Stizostedion vitreum (Mitchell); lake whitefish, Coregonus clupeaformis (Mitchell); round whitefish, Prosopium cylindraceum (Pallas); cisco, Coregonus sp.; lake cisco, Coregonus artedii (Lesueur); inconnu, Stenodus leucichthys (Guldenstadt); and Arctic charr, Salvelinus alpinus (Linnaeus).

DATA ANALYSIS

A Micro Vax II computer was used to manipulate the data. The Statistical Analysis System (1985) was used to generate length, weight, sex, age, and maturity summaries and to perform basic calculation and statistical analysis. Weight/length relationships were determined using the following power equation:

$$\text{Log}_{10}W = a + b\ (\log_{10}L)$$

where:

W = round weight in grams

L = fork length in centimeters

a = Y-intercept

b = slope of the regression line

and presented in Table 1. The standard deviation of the coefficient b(S_b) was also calculated. Relative condition factor (K) was calculated using the formula:

$$K = \frac{W \times 10^5}{L^3}$$

where:

W = round weight in grams

L = fork length in centimeters

ACKNOWLEDGMENTS

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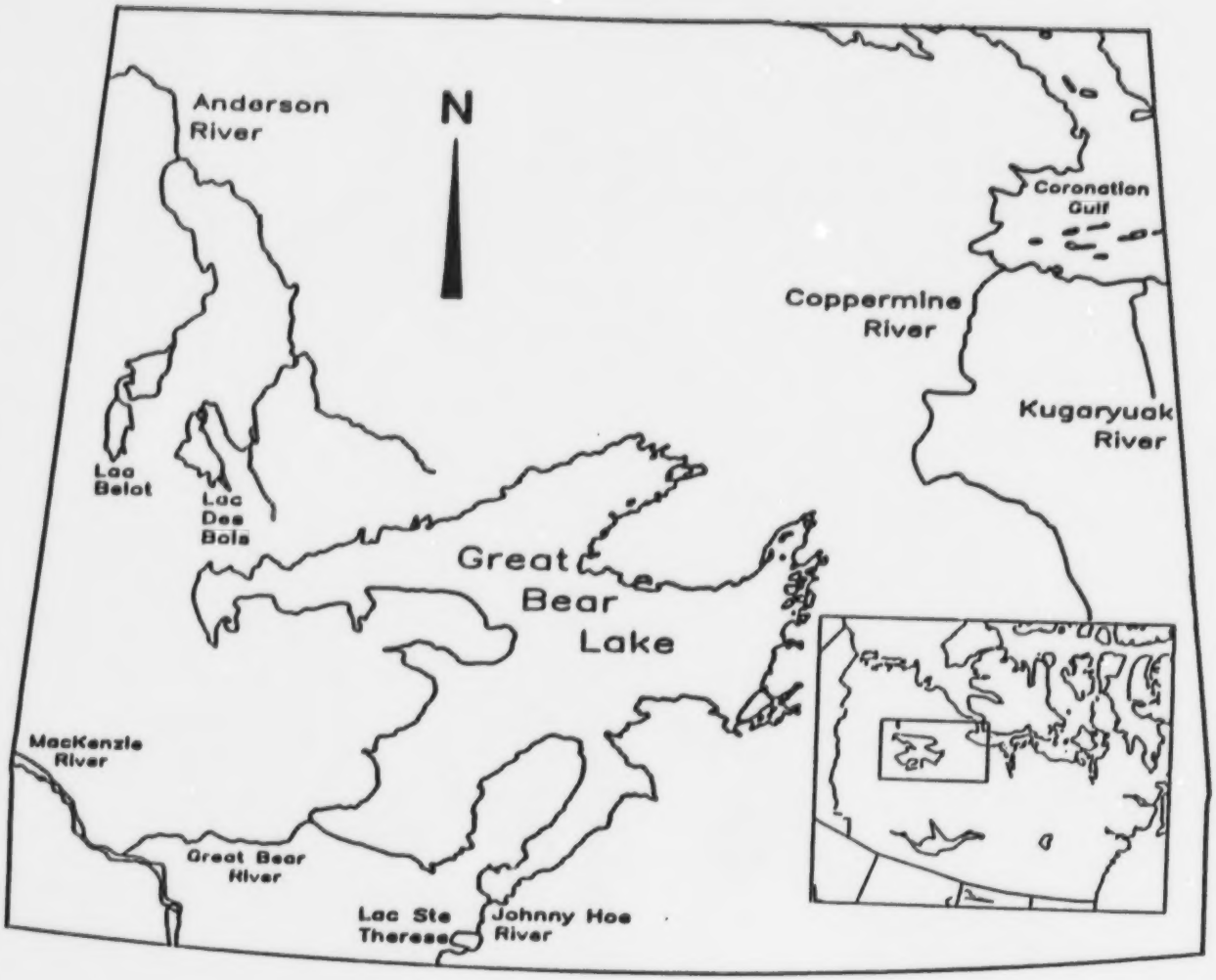


Fig. 1. Map of the northwest territories showing the location of Great Bear Lake and other lakes and rivers sport fished by anglers based at sport fishing lodges on Great Bear Lake, 1984-85.

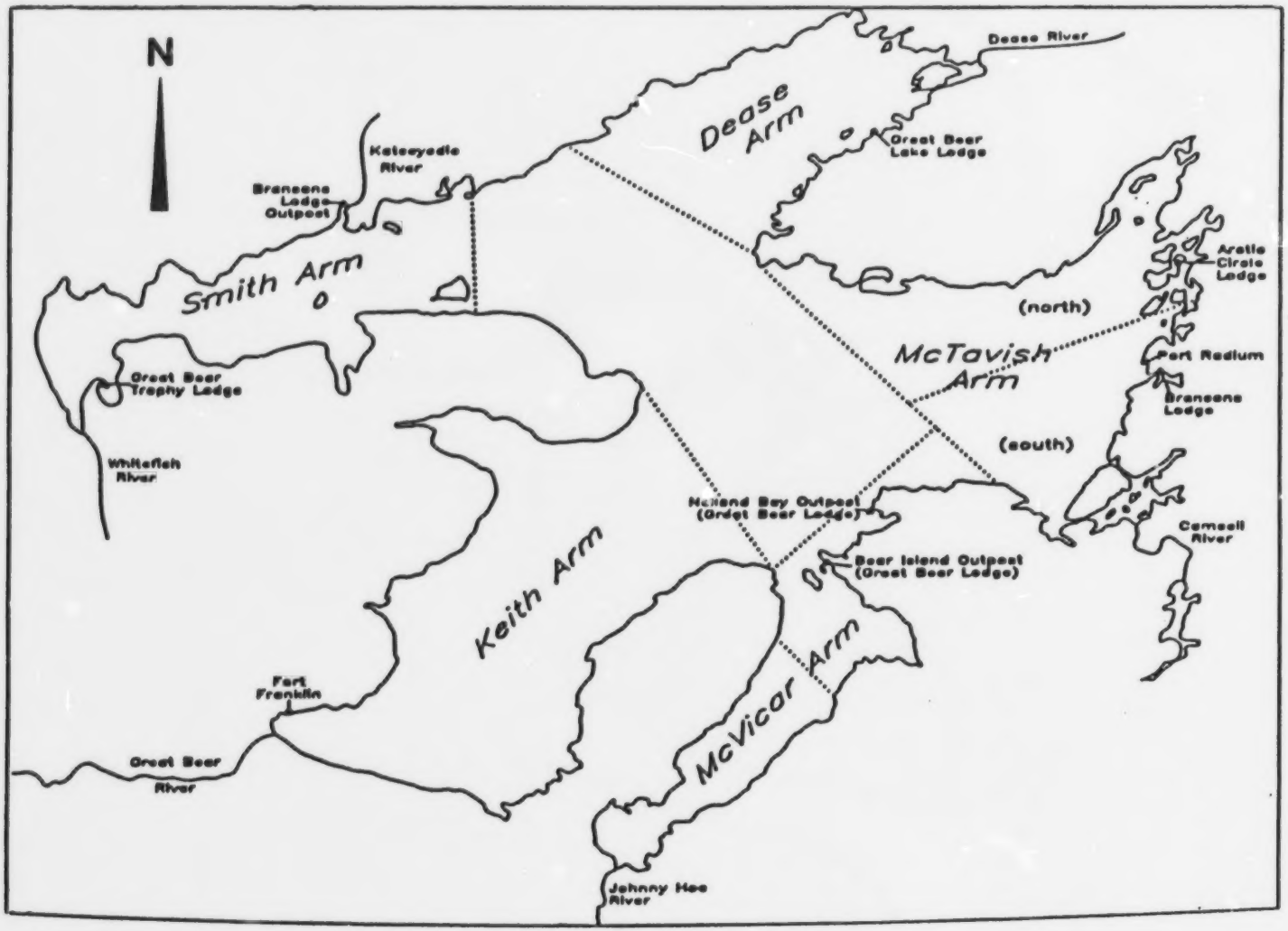


Fig. 2. Map of Great Bear Lake depicting management areas.

Table 1. Summary of weight-length relationships for each fish species, Great Bear Lake, 1984-85.

Species	N	Y-intercept (a)	Slope (b)	Standard Dev. of b (SD_b)	95% C.I. of b
Dease Arm					
Lake trout					
gillnetted	96	-5.0806	3.0391	0.0509	2.9380-3.1402
angled	292	-4.3619	2.8032	0.0540	2.6794-2.9090
combined	388	-5.0819	3.0543	0.0363	2.9832-3.1254
Lake whitefish					
gillnetted	8	-3.2098	2.3837	0.5534	1.0295-3.7379
Arctic grayling					
angled	73	-4.3070	2.7708	0.1136	2.5439-2.9977
Lake cisco					
gillnetted	21	-6.0809	3.4832	0.3050	2.8448-4.1216
McTavish Arm (north)					
Lake trout					
gillnetted	182	-5.3391	3.1429	0.0326	3.0790-3.2068
angled	542	-5.1104	3.0594	0.0252	3.0100-3.1088
combined	724	-5.2430	3.1069	0.0167	3.0742-3.1396
Lake whitefish					
gillnetted	5	-5.5578	3.2615	0.8001	0.7156-5.8074
Arctic grayling					
angled	155	-5.1073	3.0617	0.0655	2.9333-3.1901
Lake cisco					
gillnetted	6	-6.3614	3.5808	0.4176	2.4215-4.7401
McTavish Arm (south)					
Lake trout					
gillnetted	126	-4.9839	3.0151	0.0351	2.9463-3.0839
angled	260	-1.8155	1.8945	0.1143	1.6705-2.1185
combined	386	-3.9099	2.6300	0.0642	2.5042-2.7558
Arctic grayling					
angled	28	-4.2425	2.7513	0.1407	2.4620-3.0406
Northern pike					
angled	11	-4.1990	2.6625	0.2039	2.2013-3.1237
McVicar Arm (north)					
Lake trout					
gillnetted	131	-4.7264	2.9255	0.0491	2.8293-3.0217
angled	52	-4.2964	2.7848	0.1116	2.5607-3.0089
combined	183				
Lake whitefish					
gillnetted	36	-5.9364	3.4070	0.2753	2.8448-3.9692
Round whitefish					
gillnetted	12	-5.6692	3.2574	0.2378	2.7276-3.7872
Northern pike					
gillnetted	2	-3.8737	2.5476	0.0	
Lake cisco					
gillnetted	35	-2.8824	2.1452	0.2291	1.6774-2.6130
Smith Arm					
Lake trout					
gillnetted	159	-4.9566	3.0028	0.0551	2.8948-3.1108
angled	323	-4.7691	2.9409	0.0566	2.8299-3.0519
combined	482	-4.8841	2.9802	0.0395	2.9027-3.0576
Lake whitefish					
gillnetted	202	-5.2196	3.1236	0.0543	3.0172-3.2300
combined	203	-5.2265	3.1263	0.0542	3.0201-3.2325
Round whitefish					
gillnetted	35	-5.3113	3.1425	0.1929	2.7486-3.5364
Arctic grayling					
gillnetted	25	0.6212	0.8850	0.3309	0.2004-1.5696
angled	187	-3.9634	2.6441	0.0992	2.4497-2.8385
combined	212	-3.7731	2.5716	0.0969	2.3817-2.7615
Northern pike					
gillnetted	4	-4.7146	2.8443	0.0640	2.5689-3.1197
angled	39	-4.7556	2.8755	0.1639	2.5428-3.2082
combined	43	-5.0532	2.9788	0.1093	2.7579-3.1997
Lake cisco					
gillnetted	18	-8.2167	4.3746	0.5586	3.1960-5.5532

Table 2. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

		Mesh Size (mm)					Total Catch	CPUE[1]
		38	64	89	114	139		
Lake trout	No.	56	75	61	52	32	276	0.77
	%	20.3	27.2	22.1	18.8	11.6	78.6	
Lake whitefish	No.	1	18	13	11	6	49	0.14
	%	2.0	36.7	26.5	22.4	12.2	14.0	
Round whitefish	No.	3	-	-	-	-	3	<0.01
	%	100.0	-	-	-	-	0.9	
Lake cisco	No.	18	2	-	-	-	20	0.06
	%	90.0	10.0	-	-	-	5.7	
Arctic grayling	No.	3	-	-	-	-	3	<0.01
	%	100.0	-	-	5.7	-	0.9	
Total	No.	81	95	74	632	380	351	0.98
	%	23.1	27.1	21.1	17.9	10.8		

[1]No. fish/100 m of gill net/24 h

Table 3. Biological data by length interval for Arctic grayling caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
450	-	-	-	-	-	-	1	454	1050	-	1.12	100	1	454	1050	-	1.12	100
TOTAL	0						1						1					
MEAN		-	-	-	-			454	1050	-	1.12			454	1050	-	1.12	

Table 4. Biological data by age group for Arctic grayling caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
9	-	-	-	-	-	-	-	1	454	-	1050	-	1.12	100	1	454	-	1050	-	1.12	100
TOTAL	0							1							1						
MEAN		-	-	-	-	-			454	-	1050	-	1.12			454	-	1050	-	1.12	
MEAN AGE		-							9.0							9.0					

Table 5. Biological data by length interval for lake whitefish caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT
360	-	-	-	-	-	-	-	-	-	-	-	-	1	367	-	-	-	0
390	-	-	-	-	-	-	-	-	-	-	-	-	1	397	-	-	-	0
430	2	436	1050	71	1.27	50	-	-	-	-	-	-	2	436	1050	71	1.27	50
440	-	-	-	-	-	-	-	-	-	-	-	-	1	440	-	-	-	0
450	-	-	-	-	-	-	-	-	-	-	-	-	1	459	-	-	-	0
470	1	473	1600	-	1.51	100	-	-	-	-	-	-	3	476	1600	-	1.51	33
480	-	-	-	-	-	-	-	-	-	-	-	-	1	483	-	-	-	0
490	-	-	-	-	-	-	1	492	1700	-	1.43	100	3	493	1700	-	1.43	33
510	1	513	1850	-	1.37	100	1	511	2150	-	1.61	100	2	512	2000	212	1.49	100
540	-	-	-	-	-	-	-	-	-	-	-	-	1	546	-	-	-	0
550	-	-	-	-	-	-	1	555	2500	-	1.46	100	3	557	2500	-	1.46	33
560	-	-	-	-	-	-	-	-	-	-	-	-	1	567	-	-	-	0
610	1	618	2150	-	0.91	100	-	-	-	-	-	-	1	618	2150	-	0.91	100
TOTAL	5						3						21[a]					
MEAN		495	1540	489	1.27			519	2117	401	1.50			493	1756	521	1.35	

a) Includes live released fish.

Table 6. Biological data by age group for lake whitefish caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
11	1	437	-	1100	-	1.32	100	-	-	-	-	-	-	-	1	437	-	1100	-	1.32	100
12	1	434	-	1000	-	1.22	0	-	-	-	-	-	-	-	1	434	-	1000	-	1.22	0
13	1	473	-	1600	-	1.51	100	-	-	-	-	-	-	-	1	473	-	1600	-	1.51	100
15	1	513	-	1850	-	1.37	100	-	-	-	-	-	-	-	1	513	-	1850	-	1.37	100
16	-	-	-	-	-	-	-	1	492	-	1700	-	1.43	100	1	492	-	1700	-	1.43	100
17	-	-	-	-	-	-	-	1	555	-	2500	-	1.46	100	1	555	-	2500	-	1.46	100
18	1	618	-	2150	-	0.91	100	-	-	-	-	-	-	-	1	618	-	2150	-	0.91	100
TOTAL	5							2							7						
MEAN		495	76	1540	489	1.27			524	45	2100	566	1.44			503	66	1700	536	1.32	
MEAN AGE	13.8							16.5							14.6						

Table 7. Biological data by length interval for round whitefish caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
410	1	414	700	-	0.99	100	-	-	-	-	-	-	1	414	700	-	0.99	100
430	-	-	-	-	-	-	-	-	-	-	-	-	1	434	-	-	-	0
TOTAL	1						0						2[a]					
MEAN		414	700	-	0.99			-	-	-	-			424	700	-	0.99	

a) Includes live released fish.

Table 8. Biological data by age group for round whitefish caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
11	1	414	-	700	-	0.99	100	-	-	-	-	-	-	-	1	414	-	700	-	0.99	100
TOTAL	1							0							1						
MEAN		414	-	700	-	0.99			-	-	-	-	-			414	-	700	-	0.99	
MEAN AGE	11.0								-						11.0						

Table 9. Biological data by length interval for lake cisco caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
170	-	-	-	-	-	-	2	175	50	0	0.94	0	2	175	50	0	0.94	0
180	1	187	100	-	1.53	100	1	185	100	-	1.58	0	2	186	100	0	1.55	50
190	3	194	83	29	1.14	100	1	193	50	-	0.70	0	4	194	75	29	1.03	75
200	-	-	-	-	-	-	1	209	100	-	1.10	0	1	209	100	-	1.10	0
210	1	213	100	-	1.03	100	2	215	100	0	1.01	100	3	214	100	0	1.02	100
220	-	-	-	-	-	-	3	224	117	29	1.04	33	4	225	125	29	1.10	25
230	1	236	150	-	1.14	100	1	236	150	-	1.14	100	2	236	150	0	1.14	100
280	1	285	300	-	1.30	100	-	-	-	-	-	-	1	285	300	-	1.30	100
320	-	-	-	-	-	-	2	323	500	141	1.48	100	3	324	500	141	1.48	67
TOTAL	7						13						22[a]					
MEAN		215	129	81	1.20			225	158	161	1.11			226	148	133	1.15	

a) Includes live released fish.

Table 10. Biological data by age group for lake cisco caught by experimental gill nets, Dease Arm, Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	1	192	-	100	-	1.41	100	4	182	9	63	25	1.04	0	5	184	9	70	27	1.11	20
4	5	205	20	100	35	1.14	100	5	223	10	120	27	1.07	40	11	215	17	114	32	1.12	64
5	-	-	-	-	-	-	-	1	217	-	100	-	0.98	100	1	217	-	100	-	0.98	100
6	-	-	-	-	-	-	-	1	213	-	100	-	1.03	100	1	213	-	100	-	1.03	100
9	1	285	-	300	-	1.30	100	1	323	-	600	-	1.78	100	2	304	27	450	212	1.54	100
TOTAL	7							12							20						
MEAN		215	35	129	81	1.20			216	39	138	149	1.11			216	36	135	123	1.15	
MEAN AGE	4.6							4.3							4.4						

Table 11. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets, McTavish Arm (north), Great Bear Lake, 1984.

		Mesh Size (mm)					Total Catch	CPUE[1]
		38	64	89	114	139		
Lake trout	No.	135	74	73	68	29	379	2.14
	%	35.6	19.5	19.3	17.9	7.7	96.7	
Lake whitefish	No.	5	-	-	-	-	5	0.03
	%	100.0	-	-	-	-	1.3	
Round whitefish	No.	1	-	-	-	-	1	<0.01
	%	100.0	-	-	-	-	0.3	
Cisco sp.	No.	7	-	-	-	-	7	0.04
	%	100.0	-	-	-	-	1.8	
Total	No.	148	74	73	68	29	392	2.22
	%	37.8	18.9	18.6	17.3	7.4		

[1]No. fish/100 m of gill net/24 h

Table 12. Biological data by length interval for lake whitefish caught by experimental gill nets, McTavish Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
500	1	506	1700	-	1.31	100	-	-	-	-	-	-	1	506	1700	-	1.31	100
550	-	-	-	-	-	-	1	559	2500	-	1.43	100	1	559	2500	-	1.43	100
570	1	571	3350	-	1.80	100	-	-	-	-	-	-	1	571	3350	-	1.80	100
590	1	590	2800	-	1.36	100	-	-	-	-	-	-	1	590	2800	-	1.36	100
640	-	-	-	-	-	-	1	644	3800	-	1.42	100	1	644	3800	-	1.42	100
TOTAL	3						2						5					
MEAN		556	2617	840	1.49			602	3150	919	1.43			574	2830	806	1.47	

Table 13. Biological data by age group for lake whitefish caught by experimental gill nets, McTavish Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED					
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
12	1	506	-	1700	-	1.31	100	-	-	-	-	-	-	-	1	506	-	1700	-	1.31	100
13	-	-	-	-	-	-	-	1	559	-	2500	-	1.43	100	1	559	-	2500	-	1.43	100
18	1	590	-	2800	-	1.36	100	1	644	-	3800	-	1.42	100	2	617	38	3300	707	1.39	100
19	1	571	-	3350	-	1.80	100	-	-	-	-	-	-	-	1	571	-	3350	-	1.80	100
TOTAL	3							2							5						
MEAN		556	44	2617	840	1.49			602	60	3150	919	1.43			574	50	2830	806	1.47	
MEAN AGE	16.3							15.5							16.0						

Table 14 . Biological data by length interval for round whitefish caught by experimental gill nets, McTavish Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
210	-	-	-	-	-	-	1	215	100	-	1.01	0	1	215	100	-	1.01	0
TOTAL	0						1						1					
MEAN		-	-	-	-			215	100	-	1.01			215	100	-	1.01	

Table 15. Biological data by length interval for lake cisco caught by experimental gill nets, McTavish Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
170	1	174	50	-	0.95	100	1	173	50	-	0.97	100	2	174	50	0	0.96	100
190	1	198	75	-	0.97	0	-	-	-	-	-	-	2	197	63	18	0.82	0
250	-	-	-	-	-	-	1	253	200	-	1.24	100	1	253	200	-	1.24	100
280	-	-	-	-	-	-	1	282	250	-	1.11	100	1	282	250	-	1.11	100
TOTAL	2						3						6					
MEAN		186	63	18	0.96			236	167	104	1.11			213	113	89	0.98	

Table 16. Biological data by age group for lake cisco caught by experimental gill nets, McTavish Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	2	186	17	63	18	0.96	50	-	-	-	-	-	-	-	2	186	17	63	18	0.96	50
5	-	-	-	-	-	-	-	2	213	57	125	106	1.10	100	2	213	57	125	106	1.10	100
6	-	-	-	-	-	-	-	1	282	-	250	-	1.11	100	1	282	-	250	-	1.11	100
TOTAL	2							3							5						
MEAN		186	17	63	18	0.96			236	56	167	104	1.11			216	49	125	94	1.05	
MEAN AGE	3.0							5.3							4.4						

Table 17. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets, McTavish Arm (south), Great Bear Lake, 1984.

		Mesh Size (mm)					Total Catch	CPUE[1]
		38	64	89	114	139		
Lake trout	No.	35	29	26	28	7	125	0.34
	%	28.0	23.2	20.8	22.4	5.6	96.9	
Lake whitefish	No.	2	-	-	-	-	2	<0.01
	%	100.0	-	-	-	-	1.6	
Round whitefish	No.	1	1	-	-	-	2	<0.01
	%	50.0	50.0	-	-	-	1.6	
Total	No.	38	30	26	28	7	129	0.35
	%	29.5	23.3	20.2	21.7	5.4		

[1]No. fish/100 m of gill net/24 h

Table 18. Biological data by length interval for lake whitefish caught by experimental gill nets, McTavish Arm (south), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
200	-	-	-	-	-	-	1	200	100	-	1.25	0	1	200	100	-	1.25	0
590	-	-	-	-	-	-	1	597	3950	-	1.86	100	1	597	3950	-	1.86	100
TOTAL	0						2						2					
MEAN		-	-	-	-			399	2025	2722	1.55			399	2025	2722	1.55	

Table 19. Biological data by age group for lake whitefish caught by experimental gill nets, McTavish Arm (south), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	-	-	-	-	-	-	-	1	200	-	100	-	1.25	0	1	200	-	100	-	1.25	0
17	-	-	-	-	-	-	-	1	597	-	3950	-	1.86	100	1	597	-	3950	-	1.86	100
TOTAL	0							2							2						
MEAN		-	-	-	-	-			399	281	2025	2722	1.55			399	281	2025	2722	1.55	
MEAN AGE		-							10.0							10.0					

Table 20. Biological data by length interval for round whitefish caught by experimental gill nets, McTavish Arm (south), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
410	1	412	850	-	1.22	100	-	-	-	-	-	-	1	412	850	-	1.22	100
420	1	424	900	-	1.18	100	-	-	-	-	-	-	1	424	900	-	1.18	100
TOTAL	2						0						2					
MEAN		418	875	35	1.20			-	-	-	-			418	875	35	1.20	

Table 21. Biological data by age group for round whitefish caught by experimental gill nets, McTavish Arm (south), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
1	1	424	-	900	-	1.18	100	-	-	-	-	-	-	-	1	424	-	900	-	1.18	100
TOTAL	1							0							1						
MEAN		424	-	900	-	1.18			-	-	-	-	-			424	-	900	-	1.18	
MEAN AGE	1.0								-						1.0						

Table 22. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

		Mesh Size (mm)					Total Catch	CPUE[1]
		38	64	89	114	139		
Lake trout	No.	34	39	28	34	13	148	0.26
	%	23.0	26.4	18.9	23.0	8.8	56.7	
Lake whitefish	No.	3	5	3	12	13	36	0.06
	%	8.3	13.9	8.3	33.3	36.1	13.8	
Round whitefish	No.	2	10	-	-	-	12	0.02
	%	16.7	83.3	-	-	-	4.6	
Northern pike	No.	1	-	1	-	-	2	<0.01
	%	50.0	-	50.0	-	-	0.8	
Arctic grayling	No.	-	-	-	-	1	1	<0.01
	%	-	-	-	-	100.0	0.4	
Lake cisco	No.	20	39	2	1	-	62	0.11
	%	32.3	62.9	3.2	1.6	-	23.8	
Total	No.	60	93	34	47	27	261	0.46
	%	23.0	35.6	13.0	18.0	10.3		

[1]No. fish/100 m of gill net/24 h

Table 23. Biological data by length interval for Arctic grayling caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
420	1	425	800	-	1.04	0	-	-	-	-	-	-	1	425	800	-	1.04	0
TOTAL	1						0						1					
MEAN		425	800	-	1.04			-	-	-	-			425	800	-	1.04	

Table 24. Biological data by age group for Arctic grayling caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
7	1	425	-	800	-	1.04	0	-	-	-	-	-	-	-	1	425	-	800	-	1.04	0
TOTAL	1							0							1						
MEAN		425	-	800	-	1.04			-	-	-	-	-			425	-	800	-	1.04	
MEAN AGE	7.0							-							7.0						

Table 25. Biological data by length interval for northern pike caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
640	1	655	2000	-	0.71	100	-	-	-	-	-	-	1	655	2000	-	0.71	100
760	-	-	-	-	-	-	1	768	3000	-	0.66	100	1	768	3000	-	0.66	100
TOTAL	1						1						2					
MEAN		655	2000	-	0.71			768	3000	-	0.66			712	2500	707	0.69	

Table 26. Biological data by age group for northern pike caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
2	-	-	-	-	-	-	-	1	768	-	3000	-	0.66	100	1	768	-	3000	-	0.66	100
7	1	655	-	2000	-	0.71	100	-	-	-	-	-	-	-	1	655	-	2000	-	0.71	100
TOTAL	1							1							2						
MEAN		655	-	2000	-	0.71			768	-	3000	-	0.66			712	80	2500	707	0.69	
MEAN AGE		7.0							2.0							4.5					

Table 27. Biological data by length interval for lake whitefish caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
430	1	432	1000	-	1.24	0	-	-	-	-	-	-	1	432	1000	-	1.24	0
460	-	-	-	-	-	-	1	467	1450	-	1.42	0	1	467	1450	-	1.42	0
490	-	-	-	-	-	-	1	494	2000	-	1.66	100	1	494	2000	-	1.66	100
510	-	-	-	-	-	-	1	512	1750	-	1.30	0	1	512	1750	-	1.30	0
520	2	525	2100	71	1.46	100	1	527	2350	-	1.61	100	3	525	2183	153	1.51	100
530	1	535	2100	-	1.37	100	-	-	-	-	-	-	1	535	2100	-	1.37	100
540	2	549	2525	177	1.53	100	-	-	-	-	-	-	2	549	2525	177	1.53	100
550	2	557	2875	672	1.66	100	-	-	-	-	-	-	2	557	2875	672	1.66	100
560	1	560	2900	-	1.65	100	7	564	3043	516	1.69	100	8	564	3025	480	1.69	100
570	1	570	2200	-	1.19	100	4	573	2563	328	1.36	100	5	573	2490	327	1.33	100
580	2	584	3275	318	1.65	100	-	-	-	-	-	-	2	584	3275	318	1.65	100
590	2	598	3400	141	1.59	100	1	594	2900	-	1.38	100	3	597	3233	306	1.52	100
600	1	605	3150	-	1.42	100	-	-	-	-	-	-	1	605	3150	-	1.42	100
610	-	-	-	-	-	-	1	611	3400	-	1.49	100	1	611	3400	-	1.49	100
620	1	629	3950	-	1.59	100	1	624	4100	-	1.69	100	2	627	4025	106	1.64	100
640	-	-	-	-	-	-	1	645	4900	-	1.83	100	1	645	4900	-	1.83	100
650	1	654	4050	-	1.45	100	-	-	-	-	-	-	1	654	4050	-	1.45	100
TOTAL	17						19						36					
MEAN		565	2806	792	1.51			564	2863	841	1.56			565	2836	807	1.54	

Table 28. Biological data by age group for lake whitefish caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
11	2	495	88	1700	990	1.31	50	-	-	-	-	-	-	-	2	495	88	1700	990	1.31	50
12	2	577	40	2775	530	1.44	100	2	520	75	2250	1131	1.52	50	4	548	59	2513	782	1.48	75
13	5	569	20	3140	352	1.71	100	2	545	46	2075	460	1.28	50	7	562	28	2836	623	1.58	86
14	1	570	-	2200	-	1.19	100	3	540	40	2383	340	1.51	100	4	548	36	2338	293	1.43	100
15	2	614	22	3725	318	1.61	100	3	603	27	3283	881	1.48	100	5	607	23	3460	687	1.53	100
16	2	558	42	2550	707	1.45	100	-	-	-	-	-	-	-	2	558	42	2550	707	1.45	100
17	-	-	-	-	-	-	-	1	594	-	2900	-	1.38	100	1	594	-	2900	-	1.38	100
18	1	521	-	2150	-	1.52	100	2	568	3	3100	919	1.70	100	3	552	27	2783	850	1.64	100
19	-	-	-	-	-	-	-	2	544	24	2400	71	1.50	100	2	544	24	2400	71	1.50	100
20	-	-	-	-	-	-	-	1	567	-	3450	-	1.89	100	1	567	-	3450	-	1.89	100
22	-	-	-	-	-	-	-	1	645	-	4900	-	1.83	100	1	645	-	4900	-	1.83	100
TOTAL	15							17							32						
MEAN		561	46	2770	754	1.52			564	45	2818	878	1.53			563	45	2795	810	1.53	
MEAN AGE	13.7							15.9							14.8						

Table 29. Biological data by length interval for round whitefish caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
280	1	282	200	-	0.89	100	-	-	-	-	-	-	1	282	200	-	0.89	100
320	1	320	300	-	0.92	100	-	-	-	-	-	-	1	320	300	-	0.92	100
350	1	356	450	-	1.00	100	1	350	450	-	1.05	100	2	353	450	0	1.02	100
360	-	-	-	-	-	-	1	362	450	-	0.95	0	1	362	450	-	0.95	0
370	-	-	-	-	-	-	1	376	500	-	0.94	100	1	376	500	-	0.94	100
380	1	385	600	-	1.05	100	2	387	625	35	1.08	100	3	386	617	29	1.07	100
390	-	-	-	-	-	-	1	398	600	-	0.95	100	1	398	600	-	0.95	100
400	-	-	-	-	-	-	1	406	550	-	0.82	100	1	406	550	-	0.82	100
420	1	422	800	-	1.06	100	-	-	-	-	-	-	1	422	800	-	1.06	100
TOTAL	5						7						12					
MEAN		353	470	239	0.98			381	543	79	0.98			369	513	160	0.98	

Table 30. Biological data by age group for round whitefish caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
5	1	282	-	200	-	0.89	100	-	-	-	-	-	-	-	1	282	-	200	-	0.89	100
6	1	320	-	300	-	0.92	100	1	350	-	450	-	1.05	100	2	335	21	375	106	0.98	100
7	1	356	-	450	-	1.00	100	-	-	-	-	-	-	-	1	356	-	450	-	1.00	100
9	-	-	-	-	-	-	-	2	381	6	550	71	1.00	100	2	381	6	550	71	1.00	100
10	2	404	26	700	141	1.06	100	3	397	9	600	50	0.96	100	5	400	15	640	96	1.00	100
TOTAL	5							6							11						
MEAN		353	55	470	239	0.98			384	20	558	74	0.99			370	41	518	166	0.99	
MEAN AGE		7.6							9.0							8.4					

Table 31. Biological data by length interval for lake cisco caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
120	1	129	100	-	4.66	100	-	-	-	-	-	-	1	129	100	-	4.66	100
190	2	192	100	0	1.41	0	-	-	-	-	-	-	2	192	100	0	1.41	0
200	2	204	100	0	1.19	0	-	-	-	-	-	-	2	204	100	0	1.19	0
210	2	217	100	0	0.99	0	2	213	100	0	1.04	0	4	215	100	0	1.01	0
220	1	228	150	-	1.27	0	1	227	150	-	1.28	0	2	228	150	0	1.27	0
230	2	232	125	35	1.00	0	1	238	150	-	1.11	0	3	234	133	29	1.04	0
240	1	248	200	-	1.31	100	-	-	-	-	-	-	1	248	200	-	1.31	100
250	2	253	175	35	1.08	50	1	252	150	-	0.94	0	4	252	163	25	1.02	25
260	1	266	200	-	1.06	0	1	265	250	-	1.34	0	2	266	225	35	1.20	0
270	2	272	200	0	1.00	50	2	274	225	35	1.11	0	4	273	213	25	1.05	25
280	2	285	250	0	1.08	100	3	285	317	29	1.37	33	5	285	290	42	1.26	60
290	1	295	350	-	1.36	100	2	297	300	0	1.15	0	3	296	317	29	1.22	33
300	-	-	-	-	-	-	1	303	350	-	1.26	0	1	303	350	-	1.26	0
310	-	-	-	-	-	-	1	312	300	-	0.99	0	1	312	300	-	0.99	0
TOTAL	19						15						35					
MEAN		235	163	70	1.32			268	237	88	1.18			250	194	85	1.25	

Table 32. Biological data by age group for lake cisco caught by experimental gill nets, McVicar Arm (north), Great Bear Lake, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	9	211	41	122	51	1.52	22	4	223	12	125	29	1.12	0	14	217	35	125	43	1.37	14
4	5	251	16	180	27	1.15	60	4	266	11	213	48	1.12	0	9	258	15	194	39	1.14	33
5	4	280	14	250	71	1.12	50	7	295	11	314	24	1.24	14	11	289	14	291	54	1.20	27
TOTAL	18							15							34						
MEAN		237	42	187	71	1.33			268	32	237	88	1.18			251	40	197	84	1.25	
MEAN AGE	3.7							4.2							3.9						

Table 33. Catch and catch per unit effort (CPUE) for fish caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

		Mesh Size (mm)					Total Catch	CPUE[1]
		38	64	89	114	139		
Lake trout	No.	34	34	42	53	38	201	0.50
	%	16.9	16.9	20.9	26.4	18.9	35.6	
Lake whitefish	No.	27	41	69	57	62	256	0.63
	%	10.5	16.0	27.0	22.3	24.2	45.4	
Round whitefish	No.	10	25	-	-	-	35	0.09
	%	28.6	71.4	-	-	-	6.2	
Lake cisco	No.	29	4	-	-	-	33	0.08
	%	87.9	12.1	-	-	-	5.9	
Arctic grayling	No.	7	6	20	2	-	35	0.09
	%	20.0	17.1	57.1	5.7	-	6.2	
Northern pike	No.	-	3	1	-	-	4	0.01
	%	-	75.0	25.0	-	-	0.7	
Total	No.	107	113	132	112	100	564	1.39
	%	19.0	20.0	23.4	19.9	17.7		

[1]No. fish/100 m of gill net/24 h

Table 34. Biological data by length interval for Arctic grayling caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT
360	-	-	-	-	-	-	-	-	-	-	-	-	1	365	700	-	1.44	0
370	1	375	850	-	1.61	100	1	377	850	-	1.59	100	4	375	833	29	1.56	50
380	1	380	800	-	1.46	100	1	388	850	-	1.46	100	4	382	800	50	1.43	50
390	-	-	-	-	-	-	3	394	867	29	1.42	100	7	393	850	32	1.39	43
400	-	-	-	-	-	-	3	404	867	29	1.31	100	8	403	843	35	1.28	38
410	1	414	700	-	0.99	100	-	-	-	-	-	-	4	411	775	106	1.11	25
420	1	422	850	-	1.13	100	-	-	-	-	-	-	2	422	900	71	1.20	50
430	-	-	-	-	-	-	-	-	-	-	-	-	1	432	950	-	1.18	0
TOTAL	4						8						31[a]					
MEAN		398	800	71	1.30			395	863	23	1.40			397	836	60	1.34	

a) Includes live released fish.

Table 35. Biological data by age group for Arctic grayling caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
5	-	-	-	-	-	-	-	1	395	-	900	-	1.46	100	3	389	9	833	58	1.42	100
6	2	378	4	825	35	1.53	100	5	393	12	850	0	1.40	100	10	388	14	825	49	1.41	100
7	2	418	6	775	106	1.06	100	1	402	-	900	-	1.39	100	10	407	15	835	71	1.25	100
8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	422	-	950	-	1.26	-
TOTAL	4							7							24						
MEAN		398	24	800	71	1.30			395	10	864	24	1.41			397	17	835	62	1.34	
MEAN AGE	6.5							6.0							6.4						

Table 36. Biological data by length interval for northern pike caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
360	1	375	400	-	0.76	0	-	-	-	-	-	-	1	375	400	-	0.76	0
540	1	558	1300	-	0.75	100	-	-	-	-	-	-	1	558	1300	-	0.75	100
620	1	631	1750	-	0.70	0	-	-	-	-	-	-	1	631	1750	-	0.70	0
700	-	-	-	-	-	-	1	704	2400	-	0.69	0	1	704	2400	-	0.69	0
TOTAL	3						1						4					
MEAN		521	1150	687	0.73			704	2400	-	0.69			567	1463	840	0.72	

Table 37. Biological data by age group for northern pike caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
3	1	375	-	400	-	0.76	0	-	-	-	-	-	-	-	1	375	-	400	-	0.76	0
6	1	631	-	1750	-	0.70	0	-	-	-	-	-	-	-	1	631	-	1750	-	0.70	0
7	1	558	-	1300	-	0.75	100	-	-	-	-	-	-	-	1	558	-	1300	-	0.75	100
8	-	-	-	-	-	-	-	1	704	-	2400	-	0.69	0	1	704	-	2400	-	0.69	0
TOTAL	3							1							4						
MEAN		521	132	1150	687	0.73			704	-	2400	-	0.69			567	141	1463	840	0.72	
MEAN AGE		5.3							8.0							6.0					

Table 38. Biological data by length interval for lake whitefish caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
		LENGTH(MM)	WEIGHT(G)			%		LENGTH(MM)	WEIGHT(G)			%		LENGTH(MM)	WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
270	-	-	-	-	-	-	-	-	-	-	-	-	1	274	250	-	1.22	0
280	-	-	-	-	-	-	-	-	-	-	-	-	1	287	300	-	1.27	0
290	-	-	-	-	-	-	-	-	-	-	-	-	1	292	350	-	1.41	0
300	-	-	-	-	-	-	-	-	-	-	-	-	1	308	400	-	1.37	0
320	-	-	-	-	-	-	-	-	-	-	-	-	1	325	450	-	1.31	0
330	-	-	-	-	-	-	-	-	-	-	-	-	1	334	500	-	1.34	0
340	-	-	-	-	-	-	-	-	-	-	-	-	3	344	517	76	1.27	0
350	-	-	-	-	-	-	-	-	-	-	-	-	2	357	575	35	1.27	0
360	-	-	-	-	-	-	-	-	-	-	-	-	1	363	450	-	0.94	0
370	2	378	525	106	0.98	0	-	-	-	-	-	-	3	376	550	87	1.04	0
380	-	-	-	-	-	-	-	-	-	-	-	-	2	387	725	35	1.26	0
390	-	-	-	-	-	-	1	392	700	-	1.16	0	3	395	717	29	1.17	0
400	-	-	-	-	-	-	1	406	700	-	1.05	0	2	407	850	212	1.26	0
410	-	-	-	-	-	-	1	414	900	-	1.27	0	5	415	810	134	1.13	0
420	1	425	1100	-	1.43	100	1	426	950	-	1.23	0	9	424	967	100	1.27	11
430	1	435	900	-	1.09	0	1	439	1100	-	1.30	0	8	435	993	79	1.20	0
440	-	-	-	-	-	-	1	445	1150	-	1.31	100	6	446	1183	93	1.34	17
450	4	457	1313	63	1.38	75	1	450	1400	-	1.54	100	13	454	1292	120	1.38	31
460	2	465	1450	141	1.45	100	1	466	1350	-	1.33	100	15	464	1339	130	1.34	20
470	1	479	1500	-	1.36	100	1	473	1300	-	1.23	0	9	474	1440	129	1.33	11
480	3	481	1417	76	1.27	100	2	489	1625	106	1.39	100	13	484	1495	151	1.31	38
490	5	494	1580	157	1.31	100	2	494	1650	71	1.37	100	11	494	1630	162	1.35	64
500	3	508	1717	144	1.31	100	1	501	1650	-	1.31	100	14	504	1696	120	1.32	29
510	5	517	1800	122	1.30	100	-	-	-	-	-	-	11	515	1800	103	1.31	45
520	2	524	2025	35	1.41	100	2	526	1700	0	1.17	100	15	524	1908	228	1.32	27
530	5	534	1930	104	1.27	100	3	535	1933	189	1.27	100	18	533	1979	145	1.30	44
540	7	545	2164	263	1.34	100	4	544	2325	343	1.44	100	21	543	2250	271	1.39	52
550	6	554	2400	161	1.41	100	1	555	2100	-	1.23	100	10	554	2311	192	1.36	70
560	3	566	2200	180	1.21	100	2	565	2350	424	1.30	100	17	563	2254	223	1.25	29
570	3	572	2500	87	1.33	100	2	576	2575	318	1.35	100	8	574	2529	144	1.34	63
580	-	-	-	-	-	-	-	-	-	-	-	-	2	580	-	-	-	0
590	3	593	2633	231	1.26	100	-	-	-	-	-	-	6	593	2458	505	1.18	50
600	-	-	-	-	-	-	-	-	-	-	-	-	1	600	-	-	-	0
610	1	613	3300	-	1.43	100	-	-	-	-	-	-	1	613	3300	-	1.43	100
TOTAL	57						28						235[a]					
MEAN		518	1887	546	1.31			502	1721	585	1.31			493	1612	618	1.30	

a) Includes live released fish.

Table 39. Biological data by age group for lake whitefish caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	290	14	325	65	1.31	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	341	6	517	76	1.30	-
7	2	378	1	525	106	0.98	0	1	406	-	700	-	1.05	0	9	373	31	611	158	1.17	0
8	-	-	-	-	-	-	-	1	392	-	700	-	1.16	0	2	395	4	700	0	1.14	0
9	2	466	44	1275	530	1.22	50	2	438	17	1175	318	1.38	50	14	435	28	1096	257	1.32	50
10	3	456	29	1300	200	1.37	100	2	442	4	1125	35	1.30	50	8	452	24	1244	241	1.34	80
11	4	478	30	1500	308	1.37	75	-	-	-	-	-	-	-	14	470	23	1389	242	1.33	75
12	10	496	30	1685	394	1.37	100	8	504	23	1638	153	1.28	88	26	504	31	1662	272	1.30	94
13	8	526	36	1900	423	1.29	100	2	539	10	2325	672	1.47	100	11	526	32	1955	458	1.33	100
14	3	536	16	1983	208	1.29	100	3	533	59	1933	520	1.26	100	11	538	31	2050	300	1.31	100
15	11	555	24	2273	432	1.31	100	3	554	17	2400	377	1.40	100	17	549	26	2229	416	1.33	100
16	4	531	10	1925	65	1.29	100	2	553	18	2075	35	1.24	100	8	549	25	2156	370	1.30	100
17	2	593	3	2700	283	1.29	100	1	565	-	2650	-	1.47	100	4	576	21	2525	357	1.32	100
18	4	549	35	2325	371	1.40	100	-	-	-	-	-	-	-	4	549	35	2325	371	1.40	100
TOTAL	53							25							135						
MEAN		516	51	1866	555	1.31			504	55	1742	590	1.31			486	72	1602	645	1.31	
MEAN AGE	13.3							12.4							11.9						

Table 40. Biological data by length interval for round whitefish caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
190	1	197	100	-	1.31	0	-	-	-	-	-	-	1	197	100	-	1.31	0
210	-	-	-	-	-	-	1	214	150	-	1.53	0	1	214	150	-	1.53	0
220	-	-	-	-	-	-	1	228	100	-	0.84	0	1	228	100	-	0.84	0
240	3	246	133	29	0.89	0	-	-	-	-	-	-	3	246	133	29	0.89	0
260	1	260	150	-	0.85	100	-	-	-	-	-	-	1	260	150	-	0.85	100
270	1	276	250	-	1.19	0	-	-	-	-	-	-	1	276	250	-	1.19	0
310	1	315	300	-	0.96	100	2	314	350	0	1.14	100	3	314	333	29	1.08	100
320	1	325	350	-	1.02	100	2	324	350	0	1.03	100	7	325	407	61	1.19	43
330	-	-	-	-	-	-	2	333	375	35	1.01	100	5	335	430	76	1.14	40
340	3	343	450	87	1.12	100	3	346	433	58	1.05	100	7	344	457	73	1.13	86
350	-	-	-	-	-	-	-	-	-	-	-	-	2	351	600	0	1.39	0
360	-	-	-	-	-	-	1	366	450	-	0.92	100	2	366	500	71	1.02	50
370	-	-	-	-	-	-	1	370	500	-	0.99	100	1	370	500	-	0.99	100
TOTAL	11						13						35					
MEAN		285	264	148	1.03			320	358	117	1.06			315	373	149	1.12	

Table 41. Biological data by age group for round whitefish caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
4	2	219	30	100	0	1.02	0	1	214	-	150	-	1.53	0	3	217	22	117	29	1.19	0
5	3	253	6	150	0	0.93	33	1	228	-	100	-	0.84	0	4	247	13	138	25	0.91	25
6	-	-	-	-	-	-	-	1	315	-	350	-	1.12	100	1	315	-	350	-	1.12	100
7	3	315	36	333	76	1.06	67	3	320	7	350	0	1.07	100	6	318	23	342	49	1.07	83
8	1	315	-	300	-	0.96	100	4	343	6	425	50	1.05	100	5	337	13	400	71	1.03	100
9	1	342	-	400	-	1.00	100	1	331	-	350	-	0.97	100	2	337	8	375	35	0.98	100
10	-	-	-	-	-	-	-	1	366	-	450	-	0.92	100	1	366	-	450	-	0.92	100
11	-	-	-	-	-	-	-	1	370	-	500	-	0.99	100	1	370	-	500	-	0.99	100
TOTAL	10							13							23						
MEAN		280	50	235	120	1.00			320	47	358	117	1.06			302	51	304	131	1.03	
MEAN AGE	6.1							7.5							6.9						

Table 42. Biological data by length interval for lake cisco caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
170	-	-	-	-	-	-	1	177	50	-	0.90	100	1	177	50	-	0.90	100
180	1	187	50	-	0.76	100	-	-	-	-	-	-	2	186	50	0	0.78	50
190	-	-	-	-	-	-	1	190	50	-	0.73	100	1	190	50	-	0.73	100
200	-	-	-	-	-	-	1	205	100	-	1.16	100	1	205	100	-	1.16	100
210	2	215	100	0	1.01	0	1	215	100	-	1.01	0	3	215	100	0	1.01	0
230	-	-	-	-	-	-	1	233	100	-	0.79	100	1	233	100	-	0.79	100
240	-	-	-	-	-	-	1	246	150	-	1.01	100	1	246	150	-	1.01	100
280	1	283	250	-	1.10	100	-	-	-	-	-	-	1	283	250	-	1.10	100
290	1	290	300	-	1.23	100	-	-	-	-	-	-	1	290	300	-	1.23	100
310	-	-	-	-	-	-	1	317	400	-	1.26	100	1	317	400	-	1.26	100
320	-	-	-	-	-	-	3	323	1817	2324	5.31	100	3	323	1817	2324	5.31	100
340	-	-	-	-	-	-	1	342	500	-	1.25	100	1	342	500	-	1.25	100
350	-	-	-	-	-	-	1	351	550	-	1.27	100	1	351	550	-	1.27	100
TOTAL	5						12						18					
MEAN		238	160	108	1.02			271	621	1238	2.11			257	461	1024	1.73	

Table 43. Biological data by age group for lake cisco caught by experimental gill nets, Smith Arm, Great Bear Lake, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
4	-	-	-	-	-	-	-	1	215	-	100	-	1.01	0	1	215	-	100	-	1.01	0
5	3	206	16	83	29	0.93	33	4	212	33	88	48	0.86	100	8	206	25	81	37	0.87	63
6	-	-	-	-	-	-	-	1	205	-	100	-	1.16	100	1	205	-	100	-	1.16	100
7	-	-	-	-	-	-	-	2	320	4	450	71	1.38	100	2	320	4	450	71	1.38	100
8	2	287	5	275	35	1.17	100	-	-	-	-	-	-	-	2	287	5	275	35	1.17	100
9	-	-	-	-	-	-	-	3	330	10	1817	2324	5.23	100	3	330	10	1817	2324	5.23	100
10	-	-	-	-	-	-	-	1	351	-	550	-	1.27	100	1	351	-	550	-	1.27	100
TOTAL	5							12							18						
MEAN		238	46	160	108	1.02			271	65	621	1238	2.11			257	61	461	1024	1.73	
MEAN AGE		6.2							6.8							6.5					

Table 44. Summary of catch, effort, and catch per unit effort (CPUE) for fish caught by Great Bear Lake lodge-based anglers, 1984-85.

Area	Year	Species	CATCH (nos.) TOTAL	CATCH (nos.) KEPT	EFFORT ANGLERS	EFFORT ANGLER DAYS	EFFORT HOURS	CPUE /ANGLER	CPUE /ANGLER DAYS	CPUE /HOUR
Dease Arm, Great Bear Lake	1984[a]	Arctic grayling	2178	685	219	341	2008.00	9.95	6.39	1.08
		Northern pike	30	15	12	12	78.00	2.50	2.50	0.38
		Lake whitefish	15	0	2	2	16.00	7.50	7.50	0.94
McTavish Arm (north), Great Bear Lake	1984[b]	Arctic grayling	251	121	63	79	425.15	3.98	3.18	0.59
		Northern pike	10	2	6	6	37.00	1.67	1.67	0.27
		Lake whitefish	6	6	6	6	32.00	1.00	1.00	0.19
McTavish Arm (south), Great Bear Lake	1984[c]	Arctic grayling	334	90	80	102	695.50	4.18	3.27	0.48
		Northern pike	79	15	34	38	239.00	2.32	2.08	0.33
		Lake whitefish	1	0	1	1	4.00	1.00	1.00	0.25
McVicar Arm (north), Great Bear Lake	1984[d]	Arctic grayling	626	117	173	174	946.50	3.62	3.60	0.66
		Northern pike	221	6	50	50	283.50	4.42	4.42	0.78
Smith Arm, Great Bear Lake	1985[e]	Arctic grayling	3576	762	201	351	2221.00	17.79	10.19	1.61
		Northern pike	2000	172	146	189	1165.00	13.90	10.58	1.72
Anderson River	1985[e]	Lake trout	480	60	12	12	45.00	40.00	40.00	10.67
		Inconnu	8	8	8	8	30.00	1.00	1.00	0.27
Coppermine River	1984[b]	Arctic charr	323	323	33	33	N/A	9.79	9.79	N/A
	1985[e]	Arctic charr	178	91	37	59	288.50	4.81	3.02	0.62
		Arctic grayling	18	1	5	5	15.00	3.60	3.60	1.20
Lac Ste Therese	1984[c]	Arctic grayling	546	66	36	36	228.00	15.17	15.17	2.39
		Northern pike	162	24	31	31	202.00	5.23	5.23	0.80
		Walleye	318	100	37	37	233.00	8.59	8.59	1.36
Lac Belot	1985[e]	Lake trout	276	36	14	14	101.00	19.71	19.71	2.73
		Northern pike	20	0	2	2	20.00	10.00	10.00	1.00
Lac des Bois	1985[e]	Lake trout	508	62	30	33	195.50	16.93	15.39	2.60
		Northern pike	6	3	2	2	13.00	3.00	3.00	0.46
		Lake whitefish	2	2	2	2	13.50	1.00	1.00	0.15

a) Great Bear Lake Lodge
b) Arctic Circle Lodge
c) Bransons Lodge
d) Great Bear Lodge (Neiland Bay Outpost and Bear Island Outpost)
e) Trophy Lodge
N/A = Not Available

Table 45. Biological data by length interval for lake trout caught by angling, Lac Belot, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
525	1	526	1800	-	1.24	100	-	-	-	-	-	-	1	526	1800	-	1.24	100
550	1	566	2250	-	1.24	100	-	-	-	-	-	-	1	566	2250	-	1.24	100
575	3	588	2600	350	1.28	100	4	584	2325	65	1.17	75	7	586	2443	254	1.22	86
600	2	600	2425	106	1.12	100	-	-	-	-	-	-	2	600	2425	106	1.12	100
625	3	634	2833	104	1.11	100	1	649	3100	-	1.13	100	4	638	2900	158	1.22	100
650	-	-	-	-	-	-	2	662	3550	212	1.22	100	2	662	3550	212	1.23	100
675	1	678	2600	-	0.83	100	-	-	-	-	-	-	1	678	2600	-	0.[illegible]16	100
700	1	700	3900	-	1.14	100	1	700	4050	-	1.18	100	2	700	3975	106	1.[illegible]15	100
725	-	-	-	-	-	-	1	745	6000	-	1.45	100	2	746	6025	35	1.[illegible]	50
TOTAL	12						9						22					
MEAN		611	2642	516	1.15			639	3283	1218	1.21			629	3059	1119	1.[illegible]19	

Table 46. Biological data by age group for lake trout caught by angling, Lac Belot, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
11	1	526	-	1800	-	1.24	100	-	-	-	-	-	-	-	1	526	-	1800	-	1.24	100
12	1	566	-	2250	-	1.24	100	-	-	-	-	-	-	-	1	566	-	2250	-	1.24	100
13	-	-	-	-	-	-	-	1	590	-	2300	-	1.12	0	1	590	-	2300	-	1.12	0
14	3	586	7	2600	350	1.28	100	1	586	-	2350	-	1.17	100	4	587	6	2538	312	1.25	100
16	-	-	-	-	-	-	-	1	585	-	2400	-	1.20	100	1	585	-	2400	-	1.20	100
17	2	659	28	2775	247	0.98	100	1	575	-	2250	-	1.18	100	3	631	52	2600	350	1.05	100
18	1	700	-	3900	-	1.14	100	-	-	-	-	-	-	-	1	700	-	3900	-	1.14	100
22	-	-	-	-	-	-	-	1	658	-	3400	-	1.19	100	1	658	-	3400	-	1.19	100
23	1	628	-	2750	-	1.11	100	-	-	-	-	-	-	-	1	628	-	2750	-	1.11	100
26	1	636	-	2800	-	1.09	100	-	-	-	-	-	-	-	1	636	-	2800	-	1.09	100
TOTAL	10							5							15						
MEAN		614	53	2685	559	1.16			599	34	2540	484	1.17			609	46	2637	522	1.17	
MEAN AGE	16.6							16.4							16.5						

Table 47. Biological data by length interval for lake trout caught by angling, Lac des Bois, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
525	1	534	2050	-	1.35	100	-	-	-	-	-	-	1	534	2050	-	1.35	100
550	2	558	2400	141	1.38	100	-	-	-	-	-	-	2	558	2400	141	1.38	100
575	7	584	2464	180	1.23	100	4	587	2575	253	1.27	100	11	585	2505	204	1.25	100
600	5	610	2760	383	1.21	100	2	608	2800	141	1.25	100	7	609	2771	319	1.22	100
625	1	641	3350	-	1.27	100	1	638	3550	-	1.37	100	2	640	3450	141	1.32	100
650	3	662	3350	409	1.15	100	-	-	-	-	-	-	3	662	3350	409	1.15	100
675	1	690	4450	-	1.35	100	-	-	-	-	-	-	1	690	4450	-	1.35	100
700	1	710	4400	-	1.23	100	-	-	-	-	-	-	2	712	4325	106	1.20	50
725	-	-	-	-	-	-	1	725	4350	-	1.14	100	1	725	4350	-	1.14	100
750	1	750	4400	-	1.04	100	-	-	-	-	-	-	3	761	5617	1279	1.27	33
775	-	-	-	-	-	-	-	-	-	-	-	-	1	775	5600	-	1.20	0
TOTAL	22						8						34					
MEAN		617	2934	739	1.24			616	2975	669	1.26			633	3254	1137	1.25	

Table 48. Biological data by age group for lake trout caught by angling, Lac des Bois, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
13	1	534	-	2050	-	1.35	100	-	-	-	-	-	-	-	1	534	-	2050	-	1.35	100
14	1	608	-	2800	-	1.25	100	-	-	-	-	-	-	-	1	608	-	2800	-	1.25	100
15	-	-	-	-	-	-	-	1	610	-	2900	-	1.28	100	1	610	-	2900	-	1.28	100
16	3	580	7	2367	144	1.21	100	1	580	-	2400	-	1.23	100	4	580	6	2375	119	1.22	100
17	3	600	61	2533	404	1.18	100	-	-	-	-	-	-	-	3	600	61	2533	404	1.18	100
18	2	631	51	3275	742	1.29	100	-	-	-	-	-	-	-	2	631	51	3275	742	1.29	100
19	-	-	-	-	-	-	-	2	622	23	3125	601	1.29	100	2	622	23	3125	601	1.29	100
20	1	611	-	2750	-	1.21	100	-	-	-	-	-	-	-	1	611	-	2750	-	1.21	100
21	-	-	-	-	-	-	-	2	592	5	2475	35	1.20	100	2	592	5	2475	35	1.20	100
22	2	611	6	2825	742	1.23	100	-	-	-	-	-	-	-	2	611	6	2825	742	1.23	100
TOTAL	13							6							19						
MEAN		598	39	2654	499	1.23			603	20	2750	434	1.25			600	34	2684	469	1.24	
MEAN AGE	17.4							18.5							17.7						

Table 49. Biological data by length interval for Arctic grayling caught by angling, Lac Ste. Therese, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
340	-	-	-	-	-	-	1	345	550	-	1.34	0	1	345	550	-	1.34	0
370	1	379	700	-	1.29	100	-	-	-	-	-	-	1	379	700	-	1.29	100
380	-	-	-	-	-	-	2	386	750	71	1.31	100	2	386	750	71	1.31	100
390	-	-	-	-	-	-	1	395	700	-	1.14	100	1	395	700	-	1.14	100
410	1	413	900	-	1.28	100	2	413	875	35	1.25	100	3	413	883	29	1.26	100
420	1	426	900	-	1.16	0	-	-	-	-	-	-	1	426	900	-	1.16	0
430	-	-	-	-	-	-	1	438	1050	-	1.25	100	1	438	1050	-	1.25	100
480	-	-	-	-	-	-	1	480	1400	-	1.27	100	1	480	1400	-	1.27	100
TOTAL	3						8						11					
MEAN		406	833	115	1.24			407	869	262	1.26			407	859	226	1.26	

Table 50. Biological data by age group for Arctic grayling caught by angling, Lac Ste. Therese, 1984.

AGE (YR)	MALES							FEMALES							COMBINED					
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
4	-	-	-	-	-	-	-	1	345	-	550	-	1.34	0	1	345	-	550	-	1.34	0
5	-	-	-	-	-	-	-	3	403	30	850	180	1.29	100	3	403	30	850	180	1.29	100
6	2	396	24	800	141	1.28	100	1	395	-	700	-	1.14	100	3	396	17	767	115	1.23	100
7	-	-	-	-	-	-	-	1	413	-	850	-	1.21	100	1	413	-	850	-	1.21	100
8	1	426	-	900	-	1.16	0	1	412	-	900	-	1.29	100	2	419	10	900	0	1.23	50
10	-	-	-	-	-	-	-	1	480	-	1400	-	1.27	100	1	480	-	1400	-	1.27	100
TOTAL	3							8							11						
MEAN		406	24	833	115	1.24			407	40	869	262	1.26			407	35	859	226	1.26	
MEAN AGE		6.7							6.3							6.4					

Table 51. Biological data by length interval for Arctic charr caught by angling, Coppermine River, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
500	1	539	1500	-	0.96	0	2	543	2300	778	1.43	0	3	542	2033	718	1.27	0
550	7	574	1893	265	1.00	71	10	576	2005	310	1.04	70	17	575	1959	290	1.03	71
600	16	631	2491	270	0.99	75	21	622	2398	351	0.99	95	42	626	2457	309	1.00	76
650	19	680	3076	304	0.98	95	30	673	3112	292	1.02	97	56	676	3111	290	1.01	84
700	31	725	3829	374	1.00	100	29	724	3862	483	1.01	100	74	725	3799	434	1.00	81
750	22	768	4386	371	0.97	91	34	768	4372	483	0.97	100	77	770	4469	476	0.98	70
800	9	824	5400	791	0.96	100	16	820	5244	439	0.95	100	43	821	5351	552	0.96	58
850	1	850	6300	-	1.03	100	1	854	6600	-	1.06	100	11	864	6023	535	0.93	18
900	-	-	-	-	-	-	-	-	-	-	-	-	2	914	7800	707	1.02	0
TOTAL	106						143						325					
MEAN		709	3615	1054	0.99			707	3633	1075	1.00			723	3859	1179	0.99	

Table 52. Biological data by age group for Arctic charr caught by angling, Coppermine River, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
7	-	-	-	-	-	-	-	1	573	-	1800	-	0.96	100	1	573	-	1800	-	0.96	100
8	1	565	-	1450	-	0.80	0	2	622	45	2425	389	1.01	100	3	603	45	2100	626	0.94	67
9	1	688	-	3200	-	0.98	100	1	603	-	2100	-	0.96	100	2	646	60	2650	778	0.97	100
10	-	-	-	-	-	-	-	2	659	50	2775	813	0.96	100	2	659	50	2775	813	0.96	100
11	1	725	-	4500	-	1.18	100	-	-	-	-	-	-	-	1	725	-	4500	-	1.18	100
13	-	-	-	-	-	-	-	1	733	-	4000	-	1.02	100	1	733	-	4000	-	1.02	100
15	1	757	-	4000	-	0.92	100	1	696	-	3900	-	1.16	100	2	727	43	3950	71	1.04	100
16	-	-	-	-	-	-	-	1	822	-	5200	-	0.94	100	1	822	-	5200	-	0.94	100
TOTAL	4							9							13						
MEAN		684	84	3288	1337	0.97			665	80	3044	1143	0.99			671	78	3119	1154	0.99	
MEAN AGE	10.8							10.7							10.7						

Table 53. Biological data by length interval for Arctic charr caught by angling, Coppermine River, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
750	-	-	-	-	-	-	1	762	4300	-	0.97	100	2	778	4700	566	1.00	50
800	-	-	-	-	-	-	-	-	-	-	-	-	2	827	5275	389	0.93	0
850	-	-	-	-	-	-	-	-	-	-	-	-	1	851	6500	-	1.05	0
TOTAL	0						1						5					
MEAN		-	-	-	-			762	4300	-	0.97			812	5290	811	0.98	

Table 54. Biological data by age group for Arctic charr caught by angling, Coppermine River, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
12	-	-	-	-	-	-	-	1	762	-	4300	-	0.97	100	1	762	-	4300	-	0.97	100
TOTAL	0							1							1						
MEAN		-	-	-	-	-			762	-	4300	-	0.97			762	-	4300	-	0.97	
MEAN AGE		-							12.0							12.0					

Table 55. Biological data by length interval for Arctic charr caught by angling, Kugaryuak River, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
400	1	434	1050	-	1.28	0	-	-	-	-	-	-	3	426	1033	29	1.34	0
450	1	493	1450	-	1.21	0	2	492	1675	35	1.41	0	3	492	1600	132	1.35	0
500	-	-	-	-	-	-	5	524	1880	84	1.31	0	6	528	1950	187	1.33	0
550	1	598	3150	-	1.47	0	3	574	2350	180	1.25	0	5	575	2490	393	1.30	0
600	1	615	2900	-	1.25	0	1	634	3500	-	1.37	100	2	625	3200	424	1.31	50
700	1	747	4800	-	1.15	100	7	727	4279	180	1.12	100	9	731	4394	278	1.13	89
750	6	783	5217	514	1.08	100	7	774	5043	539	1.09	100	17	779	5294	750	1.12	76
800	10	822	6185	665	1.12	90	-	-	-	-	-	-	11	821	6095	697	1.11	91
850	11	867	6727	642	1.03	91	-	-	-	-	-	-	14	866	6804	614	1.05	79
900	-	-	-	-	-	-	-	-	-	-	-	-	3	914	8167	577	1.07	33
TOTAL	32						25						73					
MEAN		792	5641	1602	1.11			659	3542	1394	1.20			736	4860	2003	1.16	

Table 56. Biological data by length interval for walleye caught by angling, Lac Ste. Therese, 1984.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%	LENGTH(MM)		WEIGHT(G)			%
	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT	N	MEAN	MEAN	SD	K	MAT
430	1	434	850	-	1.04	100	-	-	-	-	-	-	1	434	850	-	1.04	100
460	-	-	-	-	-	-	1	468	1100	-	1.07	100	1	468	1100	-	1.07	100
470	4	472	1100	0	1.05	100	-	-	-	-	-	-	4	472	1100	0	1.05	100
480	1	483	1000	-	0.89	100	-	-	-	-	-	-	1	483	1000	-	0.89	100
490	4	495	1275	206	1.05	100	-	-	-	-	-	-	4	495	1275	206	1.05	100
500	1	502	1400	-	1.11	100	-	-	-	-	-	-	1	502	1400	-	1.11	100
510	1	511	1400	-	1.05	100	-	-	-	-	-	-	1	511	1400	-	1.05	100
530	1	532	1700	-	1.13	100	-	-	-	-	-	-	1	532	1700	-	1.13	100
TOTAL	13						1						14					
MEAN		487	1219	238	1.05			468	1100	-	1.07			485	1211	231	1.05	

Table 57. Biological data by age group for walleye caught by angling, Lac Ste. Therese, 1984.

AGE (YR)	MALES							FEMALES							COMBINED						
	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%	LENGTH(MM)			WEIGHT(G)			%
	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT	N	MEAN	SD	MEAN	SD	K	MAT
9	1	434	-	850	-	1.04	100	-	-	-	-	-	-	-	1	434	-	850	-	1.04	100
12	2	471	1	1100	0	1.05	100	-	-	-	-	-	-	-	2	471	1	1100	0	1.05	100
13	1	502	-	1400	-	1.11	100	-	-	-	-	-	-	-	1	502	-	1400	-	1.11	100
15	2	503	11	1425	35	1.12	100	1	468	-	1100	-	1.07	100	3	491	22	1317	189	1.11	100
16	1	473	-	1100	-	1.04	100	-	-	-	-	-	-	-	1	473	-	1100	-	1.04	100
17	2	515	25	1575	177	1.16	100	-	-	-	-	-	-	-	2	515	25	1575	177	1.16	100
TOTAL	9							1							10						
MEAN		487	29	1283	261	1.09			468	-	1100	-	1.07			485	28	1265	253	1.09	
MEAN AGE	14.0							15.0							14.1						

Table 58. Biological data by length interval for inconnu caught by angling, Anderson River, 1985.

LENGTH INTERVAL (MM)	MALES						FEMALES						COMBINED					
	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	WEIGHT(G) MEAN	SD	K	% MAT
540	2	555	1475	35	0.87	0	-	-	-	-	-	-	2	555	1475	35	0.87	0
620	2	627	2575	389	1.04	50	-	-	-	-	-	-	2	627	2575	389	1.04	50
640	1	648	2700	-	1.00	0	1	650	3000	-	1.09	100	2	648	2850	212	1.05	50
660	1	675	2650	-	0.86	100	-	-	-	-	-	-	1	675	2650	-	0.86	100
680	1	691	3250	-	0.99	0	-	-	-	-	-	-	1	691	3250	-	0.99	0
720	-	-	-	-	-	-	1	725	3150	-	0.83	100	1	725	3150	-	0.83	100
TOTAL	7						2						9					
MEAN		625	2386	683	0.95			688	3075	106	0.96			639	2539	666	0.95	

Table 59. Biological data by age group for inconnu caught by angling, Anderson River, 1985.

AGE (YR)	MALES							FEMALES							COMBINED						
	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT	N	LENGTH(MM) MEAN	SD	WEIGHT(G) MEAN	SD	K	% MAT
7	2	588	49	1875	601	0.90	0	-	-	-	-	-	-	-	2	588	49	1875	601	0.90	0
8	1	556	-	1500	-	0.87	0	-	-	-	-	-	-	-	1	556	-	1500	-	0.87	0
9	2	653	31	2750	141	1.00	100	-	-	-	-	-	-	-	2	653	31	2750	141	1.00	100
10	1	691	-	3250	-	0.99	0	1	725	-	3150	-	0.83	100	2	708	24	3200	71	0.91	50
TOTAL	6							1							7						
MEAN		622	58	2333	733	0.94			725	-	3150	-	0.83			636	66	2450	737	0.93	
MEAN AGE	8.3							10.0							8.6						

Table 60. Summary of catch and mean length, by use, of Arctic grayling caught during the intensive creel census, Great Bear Lake, 1984-85.

Area	Subarea	Kept		Released		Shore Lunch		Total	
		No.	Mean Length (cm)	No.	Mean Length (cm)	No.	Mean Length (cm)	No.	Mean Length (cm)
Dease Arm (Great Bear Lake Lodge)	1	-	-	-	-	-	-	-	-
	2	34	44.24	12	32.60	2	38.00	48	42.51
	3	23	41.13	35	35.31	8	36.75	66	37.52
	4	10	41.57	10	31.00	7	39.00	27	37.78
	Area Total	67	42.83	57	34.53	17	37.75	141	39.19
North McTavish Arm (Arctic Circle Lodge)	1	5	46.60	7	44.00	-	-	12	45.08
	2	21	41.62	9	27.89	2	35.50	32	37.38
	3	1	42.00	7	33.14	-	-	8	34.25
	4	-	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-	-
	Area Total	27	42.56	23	34.39	2	35.50	52	38.67
Mcvicar Arm (Great Bear Lodge: Neiland Bay Outpost)	1	-	-	-	-	6	-	6	-
	2	-	-	-	-	-	-	-	-
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	Area Total	-	-	-	-	6	-	6	-
McVicar Arm (Great Bear Lodge: Bear Island Outpost)	1	6	43.17	17	33.65	6	38.00	29	36.52
	2	1	46.00	5	26.40	1	33.80	7	30.00
	3	-	-	7	30.29	9	37.44	16	34.31
	4	-	-	10	36.30	3	39.00	13	36.92
	5	-	-	-	-	-	-	-	-
	Unknown	-	-	3	26.67	4	34.25	7	30.57
	Area Total	7	43.43	42	32.29	23	37.04	72	34.89
Smith Arm (Trophy Lodge)	1	31	39.42	73	33.79	18	37.50	122	35.77
	2	26	43.27	26	38.15	-	-	52	40.71
	3	18	39.83	28	37.61	8	37.75	54	38.37
	4	15	41.33	27	39.15	11	40.36	53	40.02
	5	29	41.28	71	38.39	4	42.75	104	39.37
	Area Total	119	41.02	225	36.67	41	38.83	385	38.36

Table 61. Summary of effort expended for Arctic grayling during the intensive creel census, Great Bear Lake, 1984-85.

Area	Effort	Subarea 1	Subarea 2	Subarea 3	Subarea 4	Subarea 5	Area Total
Dease Arm (Great Bear Lake Lodge)	Anglers	-	12	15	8	-	33
	Angler Days	-	14	21	10	-	45
	Angler Hours	-	35.5	44.0	14.0	-	93.5
North McTavish Arm (Arctic Circle Lodge)	Anglers	2	21	6	-	-	25
	Angler Days	4	26	6	-	-	32
	Angler Hours	12.0	72.0	9.0	-	-	99.0
McVicar Arm (Great Bear Lodge: Neiland Bay Outpost)	Anglers	2	-	-	-	-	2
	Angler Days	2	-	-	-	-	2
	Angler Hours	6.0	-	-	-	-	6.0
McVicar Arm (Great Bear (Lodge: Bear Island Outpost)	Anglers	5	6	5	8	-	15
	Angler Days	9	8	5	8	-	30
	Angler Hours	17.0	18.0	15.0	21.0	-	71.0
Smith Arm (Great Bear Trophy Lodge)	Anglers	24	6	15	14	16	49
	Angler Days	32	8	17	14	16	87
	Angler Hours	98.25	25.5	44.5	44.0	57.0	269.25

Table 62. Summary of catch per unit effort for Arctic grayling during the intensive creel census, Great Bear Lake, 1984-85.

Area	Subarea	Arctic Grayling (number) /Angler	/Angler Day	/Angler Hour
Dease Arm (Great Bear Lake Lodge)	1	-	-	-
	2	4.00	3.43	1.35
	3	4.33	3.10	1.48
	4	3.50	2.80	0.89
	Area Total	4.27	3.13	1.51
North McTavish Arm (Arctic Circle Lodge)	1	4.50	2.25	0.75
	2	1.57	1.27	0.46
	3	1.33	1.33	0.89
	4	-	-	-
	5	-	-	-
	Area Total	2.08	1.63	0.53
McVicar Arm (Great Bear Lodge: Neiland Bay Outpost)	1	3.00	3.00	1.00
	2	-	-	-
	3	-	-	-
	4	-	-	-
	Area Total	3.00	3.00	1.00
McVicar Arm (Great Bear Lodge: Bear Island Outpost)	1	5.40	3.00	1.59
	2	1.50	1.13	0.50
	3	3.20	3.20	1.07
	4	1.63	1.63	0.62
	5	-	-	-
	Area Total	4.33	2.17	0.92
Smith Arm (Trophy Lodge)	1	5.08	3.81	1.24
	2	8.67	6.50	2.04
	3	3.60	3.18	1.21
	4	3.79	3.79	1.20
	5	6.56	6.56	1.84
	Area Total	7.88	4.44	1.43

Table 63. Biological data by length interval for Arctic grayling caught by angling during the intensive creel census, Dease Arm, Great Bear Lake, 1984.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
25	1	0.8	25
28	1	0.8	28
29	1	0.8	29
30	4	3.2	30
31	7	5.6	31
32	12	9.6	32
33	2	1.6	33
34	5	4.0	34
35	5	4.0	35
36	1	0.8	36
37	10	8.0	37
38	10	8.0	38
39	10	8.0	39
40	3	2.4	40
41	8	6.4	41
42	6	4.8	42
43	7	5.6	43
44	4	3.2	44
45	2	1.6	45
46	9	7.2	46
47	4	3.2	47
48	7	5.6	48
49	1	0.8	49
50	3	2.4	50
51	1	0.8	51
54	1	0.8	54
TOTAL	125		
MEAN			39.2

Table 64. Biological data by length interval for Arctic grayling caught by angling during the intensive creel census, McTavish Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
22	1	1.9	22
23	1	1.9	23
25	1	1.9	25
26	1	1.9	26
27	1	1.9	27
28	2	3.8	28
30	3	5.8	30
31	1	1.9	31
32	3	5.8	32
34	2	3.8	34
35	2	3.8	35
36	1	1.9	36
37	1	1.9	37
38	2	3.8	38
39	2	3.8	39
40	2	3.8	40
41	2	3.8	41
42	5	9.6	42
43	1	1.9	43
44	2	3.8	44
45	5	9.6	45
46	2	3.8	46
47	6	11.5	47
48	1	1.9	48
49	1	1.9	49
51	1	1.9	51
TOTAL	52		
MEAN			38.7

Table 65. Biological data by length interval for Arctic grayling caught by angling during the intensive creel census, McVicar Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
20	1	1.4	20
23	1	1.4	23
25	4	5.6	25
26	2	2.8	26
27	4	5.6	27
28	4	5.6	28
29	3	4.2	29
30	5	6.9	30
31	4	5.6	31
33	7	9.7	33
34	1	1.4	34
35	1	1.4	35
36	5	6.9	36
37	2	2.8	37
38	4	5.6	38
39	5	6.9	39
40	2	2.8	40
41	1	1.4	41
42	2	2.8	42
43	2	2.8	43
44	4	5.6	44
45	3	4.2	45
46	3	4.2	46
47	1	1.4	47
48	1	1.4	48
TOTAL	72		
MEAN			34.9

Table 66. Biological data by length interval for Arctic grayling caught by angling during the intensive creel census, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
22	2	0.5	22
23	1	0.3	23
24	3	0.8	24
25	2	0.5	25
26	2	0.5	26
27	6	1.6	27
28	4	1.0	28
29	4	1.0	29
30	5	1.3	30
31	4	1.0	31
32	6	1.6	32
33	11	2.8	33
34	14	3.6	34
35	18	4.7	35
36	26	6.7	36
37	45	11.7	37
38	36	9.3	38
39	27	7.0	39
40	49	12.7	40
41	31	8.0	41
42	29	7.5	42
43	13	3.4	43
44	13	3.4	44
45	15	3.9	45
46	3	0.8	46
47	10	2.6	47
48	3	0.8	48
49	1	0.3	49
50	1	0.3	50
52	1	0.3	52
55	1	0.3	55
TOTAL	386		
MEAN			38.3

Table 67. Summary of catch and mean length, by use, of northern pike caught during the intensive creel census, Great Bear Lake, 1984-85.

Area	Subarea	Kept		Released		Shore Lunch		Total	
		No.	Mean Length (cm)	No.	Mean Length (cm)	No.	Mean Length (cm)	No.	Mean Length (cm)
Dease Arm (Great Bear Lake Lodge)	1	-	-	-	-	-	-	-	-
	2	-	-	-	-	-	-	-	-
	3	1	79.00	1	71.00	-	-	2	75.00
	4	-	-	-	-	-	-	-	-
	Area Total	1	79.00	1	71.00	-	-	2	75.00
North McTavish Arm (Arctic Circle Lodge)	1	-	-	-	-	-	-	-	-
	2	-	-	3	63.00	-	-	3	63.00
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-	-
	Area Total	-	-	3	63.00	-	-	3	63.00
McVicar Arm (Great Bear Lodge; Bear Island Outpost)	1	-	-	-	-	-	-	-	-
	2	-	-	12	59.17	-	-	12	59.17
	3	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-	-
	Area Total	-	-	12	59.17	-	-	12	59.17
Smith Arm (Trophy Lodge)	1	26	73.73	132	65.19	4	62.75	162	66.62
	2	4	73.00	4	66.00	-	-	8	69.50
	3	-	-	4	53.00	-	-	4	53.00
	4	-	-	-	-	-	-	-	-
	5	-	-	-	-	-	-	-	-
	Area Total	30	73.63	140	64.83	4	62.75	174	66.43

Table 68. Summary of effort expended for northern pike during the intensive creel census, Great Bear Lake, 1984-85.

Area	Effort	Subarea					Area Total
		1	2	3	4	5	
Dease Arm (Great Bear Lake Lodge)	Anglers	-	-	-	2	-	2
	Angler Days	-	-	-	2	-	2
	Angler Hours	-	-	-	4.0	-	4.0
North McTavish Arm (Arctic Circle Lodge)	Anglers	-	4	-	-	-	4
	Angler Days	-	4	-	-	-	4
	Angler Hours	-	11.0	-	-	-	11.0
McVicar Arm (Great Bear (Lodge: Bear Island Outpost)	Anglers	-	5	-	-	-	5
	Angler Days	-	5	-	-	-	5
	Angler Hours	-	12.0	-	-	-	12.0
Smith Arm (Great Bear Trophy Lodge)	Anglers	26	1	2	-	-	26
	Angler Days	28	1	2	-	-	31
	Angler Hours	84.0	8.0	7.0	-	-	99.0

Table 69. Summary of catch per unit effort for northern pike during the intensive creel census, Great Bear Lake, 1984-85.

Area	Subarea	Northern Pike (number) /Angler	/Angler Day	/Angler Hour
Dease Arm (Great Bear Lake Lodge)	1	-	-	-
	2	-	-	-
	3	1.00	1.00	0.50
	4	-	-	-
	Area Total	1.00	1.00	0.50
North McTavish Arm (Arctic Circle Lodge)	1	-	-	-
	2	0.75	0.75	0.27
	3	-	-	-
	4	-	-	-
	5	-	-	-
	Area Total	0.75	0.75	0.27
Mcvicar Arm (Great Bear Lodge; Bear Island Outpost)	1	-	-	-
	2	2.40	2.40	1.00
	3	-	-	-
	4	-	-	-
	5	-	-	-
	Area Total	2.40	2.40	1.00
Smith Arm (Trophy Lodge)	1	5.92	5.50	1.83
	2	8.00	8.00	1.00
	3	2.00	2.00	0.52
	4	-	-	-
	5	-	-	-
	Area Total	6.38	5.35	1.68

Table 70. Biological data by length interval for northern pike caught by angling during the intensive creel census, Dease Arm, Great Bear Lake, 1984.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
70	1	50.0	71
78	1	50.0	79
TOTAL	2		
MEAN			75.0

Table 71. Biological data by length interval for northern pike caught by angling during the intensive creel census, McTavish Arm (north), Great Bear Lake, 1984.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
48	1	33.3	49
66	1	33.3	66
74	1	33.3	74
TOTAL	3		
MEAN			63.0

Table 72. Biological data by length interval for northern pike caught by angling during the intensive creel census, McVicar Arm (north), Great Bear Lake, 1984.

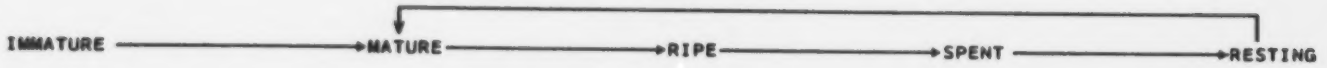
LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
38	1	8.3	39
48	2	16.7	49
50	1	8.3	51
60	3	25.0	60
64	4	33.3	64
84	1	8.3	85
TOTAL	12		
MEAN			59.2

Table 73. Biological data by length interval for northern pike caught by angling during the intensive creel census, Smith Arm, Great Bear Lake, 1985.

LENGTH INTERVAL (CM)	NO.	PERCENT	MEAN FORK LENGTH(CM)
32	1	0.6	32
34	1	0.6	35
40	1	0.6	40
42	5	3.1	43
44	4	2.5	45
46	2	1.3	46
48	6	3.8	49
50	4	2.5	50
52	4	2.5	53
54	5	3.1	54
56	7	4.4	57
58	4	2.5	59
60	9	5.6	60
62	4	2.5	63
64	5	3.1	64
66	10	6.3	67
68	18	11.3	69
70	12	7.5	71
72	9	5.6	72
74	17	10.6	74
76	5	3.1	76
78	6	3.8	79
80	8	5.0	80
82	2	1.3	83
84	3	1.9	84
86	3	1.9	87
90	1	0.6	90
92	1	0.6	93
94	1	0.6	94
96	1	0.6	97
100	1	0.6	100
TOTAL	160		
MEAN			66.4

Appendix 1. A descirption of the relative stages of maturity used for northern fishes.

MATURITY FLOW CHART



FISH MATURITY CODE

Maturity Stage		Female		Male
Immature (virgin)	1	-Ovaries granular in texture -hard and triangular in shape -up to full length of body cavity -membrane firm -eggs distinguishable	6	-Testes long and granular -tubular and scalloped shape -up to full body length -putty like firmness
Mature	2	-Current year spawner -ovary fills body cavity -eggs near full size but not loose -not expelled by pressure	7	-Current year spawner -testes large and lobate -white to purplish color -centers may be fluid -milt not expelled by pressure
Ripe	3	-Ovaries greatly extended & fill body cavity -eggs full size and transparent -eggs expelled by slight pressure	8	-Testes full size -white and lobate -milt expelled by slight pressure
Spent	4	-Spawning complete -ovaries ruptured and flaccid -seed eggs visible -some retained eggs in body cavity	9	-Spawning complete -testes flaccid with some milt -blood vessels obvious -testes violet-pink in color
Resting	5	-Ovary 40-50% of body cavity -membrane thin, loose, & semi-transparent -healed from spawning -seed eggs apparent with few atretic eggs -some eggs may be retained in body cavity	10	-Testes tubular, less lobate -healed from spawning -no fluid in center -usually full length -mottled and purplish in color
Unknown (virgin)	0	-cannot be sexed -gonads long or short & thin -transparent or translucent		
Unknown (non-virgin)	11	-resting fish -has spawned but gonads regenerated -sexing not possible		